

REMARKS

This application has been carefully reviewed in light of the Office Action dated June 29, 2010. Claims 1, 10, 11, and 26 are in the application, with Claim 1 being independent. Claims 9 and 22 to 25 have been cancelled without prejudice. Claim 26 has been newly added. Reconsideration and further examination are respectfully requested.

Claims 1, 9 to 11, and 22 to 25 were rejected under 35 U.S.C. § 112, first paragraph, for alleged failure to comply with the enablement requirement. These rejections are respectfully traversed.

According to the Office Action, the specification provides no guidance as to the synthesis of a probe carrier wherein the number of spots in each of the areas is proportional to an average amount of expression in humans of a target gene. Further, the Office Action asserts that the specification does not describe isolating a nucleic acid and quantifying the amounts of expressed genes therein so as to generate a profile of “average” expression in humans.

However, Applicant respectfully submits that the simultaneous detection of two or more target genes in a solution is commonly carried out. Though average expression amounts for all genes in humans may not be exactly known, the relative proportion of expression amounts for plural target genes is usually employed for the estimation of human body conditions. For instance, abnormal expression in a certain patient is usually detected by comparing the relative proportion of expression amounts for plural genes with the same under normal (healthy) conditions as a reference.

In the present invention, it is possible to obtain the relative proportion of expression amounts for two or more target genes at high precision even when the individual expression amounts for those genes are greatly different from each other. This

can be achieved by using comparable dynamic ranges. See, for example, Examples 1 and 2 of the subject application.

In view of the foregoing, Applicant respectfully submits that the subject application is in full compliance with the enablement requirement.

Claims 1, 9, 10, and 23 were rejected under 35 U.S.C. § 103(a) over Biosensors and Bioelectronics, Vol. 18, 2003, p 1455-1459 (Sheehan) in view of U.S. Publication No. 2004/0081969 (Ilsley). Claim 9 was rejected under 35 U.S.C. § 103(a) over Sheehan in view of Ilsley and further in view of U.S. Publication No. 2004/0081967 (Leproust). Claim 11 was rejected under 35 U.S.C. § 103(a) over Sheehan in view of Ilsley and further in view of U.S. Publication No. 2004/0009512 (Ares).

Leproust is newly-cited, but was not listed on the Form PTO-892 included with the Office Action. Accordingly, a new Form PTO-892 is respectfully requested.

The § 103 rejections are respectfully traversed.

Claim 1 recites, *inter alia*, (i) at least two spots of the same probe are arranged in each of the areas, and (ii) the number of spots for the genes differs depending on the genes.

By virtue of the foregoing features, it is possible to arrange probes in corresponding areas at a higher precision than arranging probes uniformly in each of such areas (e.g., by plain coating). In addition, it is possible to control the amount of molecules for each probe by changing the number of spots in the area for the probe.

None of Sheehan, Ilsley, Leproust, and Ares, even in the proposed combinations, assuming, *arguendo*, that such could be combined, is seen to disclose or suggest at least the foregoing features, or the attendant benefits provided thereby.

The dependent claims are also submitted to be patentable because they set forth additional aspects of the claims and are dependent from the independent claim discussed above. Therefore, separate and individual consideration of each dependent claim is respectfully requested.

The application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

No fees are believed due; however, should it be determined that additional fees are required, the Director is hereby authorized to charge such fees to Deposit Account 06-1205.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,

/Damond E. Vadnais/
Damond E. Vadnais
Attorney for Applicant
Registration No. 52,310

FITZPATRICK, CELLA, HARPER & SCINTO
1290 Avenue of the Americas
New York, New York 10104-3800
Facsimile: (212) 218-2200